

***Marbled Murrelet Effectiveness Monitoring  
Nesting Habitat Core Team Conference Call 11/8/99***

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Overview

The team gave each other progress reports on activities over the last several months. CA has begun some modeling efforts with various map sources other than the Northwest Forest Plan vegetation maps (which they only received within the last month). WA has worked on the murrelet database but doesn't yet have the NFP vegetation map. OR has the NFP vegetation map for the Oregon Coast Range but the murrelet database is not up to date.

California

SM et al. have been working on several habitat modeling projects. She sent the team a draft manuscript that is in review for publication. It is a pilot study in S. Oregon. Another manuscript is being written for the CA portion which will also compare OR and CA. A third one brings in offshore variables. In CA the vegetation coverage they used is not going to be updated or repeated. The Ralph Warbington product is expected to be updated, however, there is no funding identified at this time for that update. Also, SM has no mapping money right now. For Southern OR they used a coverage that is older. Unfortunately, that area is one of the last areas of OR and WA that will be updated in Region 6.

Comments and questions about the manuscript:

JB - Provided written comments. Consider and include interaction terms, different models can be compared using AIC values but only with the same set of values of the dependent variable, be careful of cause and effect statements, etc.

NB What about the use of presence detections in the occupancy sites? Was it standardized? Does averaging the numbers of detections handle that? Yes.

Circle drawn around occupied station (~30ac). Then have overlapping circles. Selected groups of circles to maximize sample size without much (5%) overlap. Looked at different landscape scales ranging from 125ac - 2000ac for different analyses. TM If you go above the 125 ac, how do we know it wasn't occupied? SM Don't know at the larger plot size. TM This is fairly critical because for logistic regression must have your 0/1 variables clearly defined. TM Quality assurance concerns about using detections since continuous variables. Abundance is not a good word choice, activity is maybe a better word. Also detections are not tied to a site.

DE reviewed it comparing it with what we talked about doing for EM. Since you didn't find significance at the scale EM was talking about using (~ie, 120ac), should we use a different scale? We should at least consider it, yes. What to measure? If not doing an analysis at a certain

scale. If its too small, doesn't tell us anything about the landscape. If too big, may be calling an occupied site unoccupied. JB If you are using AIC as the measure to decide which scale to use, that is not an appropriate use of the AIC tool since its different data.

DE-Didn't we decide to do principle components analysis to reduce variables? Hard part is interpreting the model once you have developed one. Objective is to take the data (vegetation coverage) and predict occupancy or not. Need a blueprint to follow. DE Suggested SM develop a preliminary outline of the modeling process since they are furthest along. SM agreed. DE will assist.

#### Washington

RW has worked with Washing Department of Fish and Wildlife on their murrelet database. He sent the team a summary table. Team asked for clarification on the table. Some sites have been digitized. Some are not digitized, but have they have field forms and could be digitized. Some have points on the field forms, but the area being surveyed was not delineated and would have to determined.

DE thinks we'll have to eliminate those absence sites that have been harvested. Chose 1995-98 and only used 1994 if part of two years. Buffered 300 meters and grouped them. Then went back to the original data sheets.

Note recent report released: USDA/PNW Research Report 521 - Sandlance a review of predators and prey items. September 1999. John Piatt et al.

#### Oregon

NB, KO, Kim Nelson and representatives from the Oregon Department of Fish and Wildlife have discussed updating the Oregon murrelet database which is current through 1995 with some 1996 and 1997 records entered. Otherwise, the data rests with all the individual entities that have gathered it (with the exception that Tom Hamer has collected data for a new analysis of the PSG Inland Survey Protocol). KO worked with Tom on that effort and will continue to work toward updating the Oregon database.

#### To Do List:

1. Sherri will draft a preliminary outline of the modeling steps. Diane offered to help. That will be sent to Jim and Tim for review. The group will receive it during the first part of the week of November 22 and have a conference call December 1.
2. Naomi will send Sherri copies of Kim Nelson and Tom Hamer's Tree-climbing reports.
3. Randall will send the team another copy of his table with further explanations for the categories.

#### Next Meeting:

Conference call 9:05 am December 1, 1999. Call 208-334-9842.